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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,411	06/06/2000	Roger Wolff	13237-2575(MS-149368.1)	9449
27488	7590	12/08/2004	EXAMINER	
MICROSOFT CORPORATION C/O MERCHANT & GOULD, L.L.C. P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			SMITH, PETER J	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

17

<b>Office Action Summary</b>	<b>Application No.</b> 09/588,411	<b>Applicant(s)</b> WOLFF ET AL.	
	<b>Examiner</b> Peter J Smith	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-8,10-19,21 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10-19,21 and 24-28 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/12/04, 9/27/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: amendment filed 9/16/2004, IDS filed on 7/12/2004 and 9/27/2004.
2. Claims 1-3, 5-8, 10-19, 21, and 24-28 are pending in the case. Claims 1, 10, 19, and 23 are independent claims.

### ***Claim Objections***

3. Claims 21 and 26 are objected to because of the following informalities: Claim 21 depends on cancelled claim 20. Claim 26 depends on itself. It is assumed for the purpose of examination that claims 21 and 26 depend from independent claim 19, according to Applicant remarks made in page 13 of the response. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-3, 5-8, 10-19, 21, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al. (hereinafter "Beauregard"), US 5,974,413 filed 07/03/1997 in view of Church et al. (hereinafter "Church"), US 5,541,836 patented 7/30/1996.**

**Regarding independent claim 1 and dependent claim 5,** Beauregard teaches receiving a string of text in a recognizer after the entire string of text has been entered in the electronic document library in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7. Beauregard teaches transmitting a string of text to a plurality of recognizer software modules in fig. 4-7 and col. 36 line 63 – col. 37 line 7, but does not teach using recognizer plug-ins. Beauregard teaches in each of the plurality of recognizer software modules, annotating the string of text to determine a plurality of labels, wherein the plurality of labels is determined based at least on the context of the string of text in the electronic document in fig. 7, col. 5 lines 12-56, and col. 25 line 11 – col. 26 line 29. Beauregard does not teach using the surrounding words to determine the contextual meaning of the recognized word. Church does teach using the surrounding words to automatically determine the contextual meaning of a recognized word in the col. 3 line 45 – col. 4 line 6. Beauregard teaches transmitting the plurality of labels from the recognizer modules to the recognizer dynamic-link library and transmitting the plurality of labels to the application program module in fig. 4-7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Church into Beauregard to have created the claimed invention. It would have been obvious and desirable for one of ordinary skill to use plug-in software modules for the recognizer software modules of Beauregard. Plug-in software was well known to one of ordinary skill at the time of the invention and would have allowed for simple modification of and enhancement of the text strings which the recognizer library could have discerned. It would have been obvious and desirable to have further enhanced Beauregard with the teaching of Church to have enabled Beauregard to have automatically determined the context of a recognized word and

Art Unit: 2176

then to have appropriately labeled the word and presented a menu of options appropriate to the determined context as taught in col. 25 line 11 – col. 26 line 29. This would have been a desirable modification by eliminating the need of Beauregard to have to rely on profile selection by the user to recognize the appropriate context of a recognized word.

**Regarding dependent claim 2**, Beauregard teaches synchronizing a plurality of labels received from the recognizer module before transmitting the plurality of labels to the application program module in col. 42 line 27 – col. 43 line 21. The labels are synchronized in order to be presented simultaneously to the user in a menu by the recognized word.

**Regarding dependent claim 3**, Beauregard teaches receiving a plurality of labels in an action library in fig. 7 and col. 5 lines 12-56. Beauregard teaches displaying a menu displaying a plurality of actions based on a label in fig. 9. Beauregard does not teach using action plug-in software. It would have been obvious and desirable for one of ordinary skill to use plug-in software modules for the action library of Beauregard. Plug-in software was well known to one of ordinary skill at the time of the invention and would have allowed for simple modification of and enhancement of the actions implemented by the action library.

**Regarding dependent claim 6**, Beauregard teaches performing a text string service in fig. 7 and col. 5 lines 12-56 which would have modified the electronic document being worked on.

**Regarding dependent claim 7**, Beauregard teaches causing the application program module to fire an event within an object model of the application program module and causing a piece of code associated with the event to be executed when at least one of the plurality of labels is determined in fig. 7, 9, and col. 5 lines 12-56.

**Regarding dependent claim 8,** Beauregard does not teach determining the language of the string of text if the language is not recognized by the recognizer library. Language software was well known to one of ordinary skill in the art at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined language software with Beauregard to create the claimed invention. It would have been obvious and desirable to have determined the language of unrecognized commands so that the invention could have been geographically portable and would have been able to have been marketed in countries using a different language than the default of the invention. Adapting software from one language to another is known as localization.

**Regarding independent claim 10,** Beauregard teaches determining whether an entered string of text matches one of a plurality of stored strings and determining an action if the string is matched in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7. Beauregard teaches determining a label associated with the matched stored string, wherein the label is determined based at least on the context of the string of text in the electronic document in fig. 7, col. 5 lines 12-56, and col. 25 line 11 – col. 26 line 29. Beauregard does not teach using the surrounding words to determine the contextual meaning of the recognized word. Church does teach using the surrounding words to automatically determine the contextual meaning of a recognized word in the col. 3 line 45 – col. 4 line 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Church into Beauregard to have created the claimed invention. It would have been obvious and desirable to have further enhanced Beauregard with the teaching of Church to have enabled Beauregard to have automatically determined the context of a

recognized word and then to have appropriately labeled the word and presented a menu of options appropriate to the determined context as taught in col. 25 line 11 – col. 26 line 29. This would have been a desirable modification by eliminating the need of Beauregard to have to rely on profile selection by the user to recognize the appropriate context of a recognized word.

**Regarding dependent claim 11**, Beauregard teaches determining a set of actions associated with a label for a string of text in fig. 7 and 9, and col. 5 lines 12-56.

**Regarding dependent claim 12**, Beauregard teaches displaying an indication indicating that a label has been found in fig. 9 and col. 5 lines 12-56.

**Regarding dependent claim 13**, Beauregard teaches determining that a user has selected a string of text and in response, displaying a plurality of actions to the user in fig. 7 and 9, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

**Regarding dependent claims 14 and 15**, Beauregard teaches receiving an indication that one of the plurality of actions has been selected and in response to receiving an indication that one of the plurality of actions has been selected, then causing the application program module to execute the selected action in fig. 7 and 9, and col. 5 lines 12-56.

**Regarding dependent claim 16**, Beauregard teaches wherein the application program module executes the selected action by determining whether an action library assigned to the action is available and if so, then receiving instructions from the action dynamic link library assigned to the selected action in fig. 7 and 9, and col. 5 lines 12-56.

**Regarding dependent claim 17**, Beauregard does not teach if an action plug-in dynamic link library is not available, then using a Uniform Resource Locator assigned to the action to navigate to a Web site and download the action plug-in dynamic link library. Beauregard does

Art Unit: 2176

teach the use of third party software in fig. 7. The technique of using a Uniform Resource Locator assigned to the action to navigate to a Web site and download software in the event it was not available was well known to one of ordinary skill in the art at the time of the invention and would have been obvious to have included in Beauregard so that it could have automatically stayed up-to-date.

**Regarding dependent claim 18,** Beauregard does not determine metadata associated with the string of text. Metadata was used at the time of the invention in common documents such as HTML documents to identify certain strings of text. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Beauregard in view of Church to have created the claimed invention. It would have been obvious and desirable to have used the metadata identification used in common documents at the time of the invention to have improved the action determination of Beauregard.

**Regarding independent claim 19,** Beauregard teaches an application program module for creating an electronic document in col. 5 lines 51-56. Beauregard teaches a recognizer dynamic link library and an action library which are connected to an application program module in fig. 7 and col. 5 lines 12-56. Beauregard teaches the use of third party software in fig. 7, but does not specifically teach the use of plug-ins. Beauregard teaches wherein at least one recognizer software module receives the string and annotates the string to determine a label, wherein the label is determined based on the context of the string in the electronic document in fig. 7, col. 5 lines 12-56, and col. 25 line 11 – col. 26 line 29. Beauregard does not teach using the surrounding words to determine the contextual meaning of the recognized word. Church



Art Unit: 2176

does teach using the surrounding words to automatically determine the contextual meaning of a recognized word in the col. 3 line 45 – col. 4 line 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Church into Beauregard to have created the claimed invention. Plug-ins were well known at the time of the invention for allowing easy modification and enhancement of software. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the knowledge of plug-ins with the recognizer library so that the library could have been easily modified and enhanced. It would have been obvious and desirable to have further enhanced Beauregard with the teaching of Church to have enabled Beauregard to have automatically determined the context of a recognized word and then to have appropriately labeled the word and presented a menu of options appropriate to the determined context as taught in col. 25 line 11 – col. 26 line 29. This would have been a desirable modification by eliminating the need of Beauregard to have to rely on profile selection by the user to recognize the appropriate context of a recognized word.

**Regarding dependent claim 21**, Beauregard teaches the use of third party software in fig. 7, but does not specifically teach the use of plug-ins. Plug-ins were well known at the time of the invention for allowing easy modification and enhancement of software. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the knowledge of plug-ins with the action library so that the library could have been easily modified and enhanced.

**Regarding dependent claim 24**, Beauregard teaches comparing the string of text with a plurality of stored strings with an associated stored label to determine a match and if so, then

Art Unit: 2176

labeling the string of text with the associated stored label of the matched stored string in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

**Regarding dependent claim 25**, Beauregard teaches wherein the at least one recognizer software module compares the string to a plurality of stored strings to determine whether the string matches any of the stored strings in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

**Regarding dependent claim 26**, Beauregard teaches wherein the label is associated with a matched stored string in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

**Regarding independent claim 27 and dependent claim 28**, Beauregard teaches receiving a string of text in a recognizer after the entire string of text has been entered in the electronic document library in fig. 7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line 7.

Beauregard teaches transmitting a string of text to a plurality of recognizer software modules in fig. 4-7 and col. 36 line 63 – col. 37 line 7, but does not teach using recognizer plug-ins.

Beauregard teaches in each of the plurality of recognizer software modules, annotating the string of text to determine a plurality of labels, wherein the plurality of labels is determined based at least on the context of the string of text in the electronic document in fig. 7, col. 5 lines 12-56, and col. 25 line 11 – col. 26 line 29. Beauregard does not teach using the surrounding words to determine the contextual meaning of the recognized word. Church does teach using the surrounding words to automatically determine the contextual meaning of a recognized word in the col. 3 line 45 – col. 4 line 6. Beauregard teaches transmitting the plurality of labels from the recognizer modules to the recognizer dynamic-link library and transmitting the plurality of labels to the application program module in fig. 4-7, col. 5 lines 12-56, and col. 36 line 63 – col. 37 line

Art Unit: 2176

7. Beauregard teaches receiving the plurality of labels in an action dynamic link library, transmitting the plurality of labels to a plurality of action software modules, and determining, in the action software modules, a plurality of actions based on the labels and displaying a plurality of actions received from the plurality of action software modules in fig. 7, col. 5 lines 12-56, col. 36 line 63 – col. 37 line 7, and col. 42 line 27 – col. 43 line 21.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Church into Beauregard to have created the claimed invention. It would have been obvious and desirable for one of ordinary skill to use plug-in software modules for the recognizer software modules of Beauregard. Plug-in software was well known to one of ordinary skill at the time of the invention and would have allowed for simple modification of and enhancement of the text strings which the recognizer library could have discerned. It would have been obvious and desirable to have further enhanced Beauregard with the teaching of Church to have enabled Beauregard to have automatically determined the context of a recognized word and then to have appropriately labeled the word and presented a menu of options appropriate to the determined context as taught in col. 25 line 11 – col. 26 line 29. This would have been a desirable modification by eliminating the need of Beauregard to have to rely on profile selection by the user to recognize the appropriate context of a recognized word.

*Response to Arguments*

6. Applicant's arguments with respect to claims 1-3, 5-8, 10-19, 21, and 24-28 have been considered but are moot in view of the new ground(s) of rejection. Before the Examiner responds to Applicant's arguments, he would like to explain the change in the prior art used to reject Applicant's claimed invention, specifically regarding Bays et al. (hereinafter "Bays"). The Examiner has ceased relying on the teachings of Bays to teach deficiencies in Beauregard et al. (hereinafter "Beauregard") formerly identified by the Examiner based on the Examiner's improved understanding of the claim limitations. The Examiner now believes that Beauregard does teach the limitation which he formerly relied upon Bays to teach.

Regarding Applicant's arguments in pages 10-12 that Beauregard does not teach the newly amended limitations of claim 1, the Examiner respectfully disagrees. Regarding Applicant's assertion that Beauregard analyzes keystrokes as they are being entered, the Examiner notes that whole words appear to be analyzed in fig. 7. Furthermore, in col. 36 line 63 – col. 37 line 7 describes an alternate embodiment of Beauregard which analyzes a previously entered text string for active words. The Examiner believes the individual words of Beauregard is a "string of text" as required by the claim.

Regarding Applicant's argument that Beauregard does not consider the context of the surrounding words, the Examiner notes in col. 25 line 11 – col. 26 line 29 that Beauregard is aware of the issue of different contextual meanings for a single spelling of a particular word. Beauregard implements a solutions of profiles which enables a user to select the appropriate context for a word before the word is detected. This solution does take the context of the string into account, as required by a broad and reasonable interpretation of the amended claim

Art Unit: 2176

limitation, but does not determine the context based on the surrounding words, as is pointed out by Applicant in page 11 of the Response. Thus, the Examiner has cited and applied a new prior art reference of Church et al. (hereinafter "Church"), which teaches automatically determining the context of a word based on the surrounding words. The Examiner believes this teaching is relevant to the word context issue discussed by Beauregard and would have enabled one of ordinary skill in the art to have enhanced Beauregard to have eliminated the need of profiles by automatically determining the context of the action word and consequently automatically presented the appropriate menu for that context.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sadler, US 5,128,865 patented 7/7/1992 discloses determining the semantic relatedness of lexical items in a text. Kucera et al., US 4,868,750 patented 9/19/1989 discloses a collocation grammar system. Lange et al., US 4,674,065 patented 6/16/1987 discloses a system for detecting and correcting contextual errors in a text processing system.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2176

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PJS  
11/26/2004

  
**JOSEPH FEILD**  
**SUPERVISORY PATENT EXAMINER**